

CLAIMS

1. A recording apparatus for recording data files on a FAT-formatted information-recording medium, comprising:
 - creating means for dividing a FAT in the information-recording medium into a plurality of segment tables of a predetermined size and creating control information corresponding to each of the segment tables;
 - reading means for reading a segment table from the information-recording medium according to the control information created by the creating means;
 - maintaining means for maintaining the segment table read by the reading means;
 - recording means for referring to the segment table maintained by the maintaining means to detect free unit recording areas in the information-recording medium, and recording the data files in the detected unit recording areas;
 - updating means for updating the segment table maintained by the maintaining means, in response to the process of the recording means; and
 - overwriting means for partially overwriting the FAT in the information-recording medium with the updated segment table.
- 25 2. The recording apparatus according to Claim 1, wherein

the control information includes at least one of information for identifying the corresponding segment table, the number of the free unit recording areas indicated by the segment table, the total capacity of the free unit areas, the
5 address of the first free unit recording area indicated by the segment table, and a flag for specifying whether or not the corresponding segment table is to be read at the time of recording the data files.

10 3. The recording apparatus according to Claim 1, wherein the information-recording medium is removable.

4. The recording apparatus according to Claim 2, wherein the information-recording medium is a microdrive.

15 5. The recording apparatus according to Claim 1, wherein the size of the segment table is determined according to the capacity of the maintaining means.

20 6. The recording apparatus according to Claim 1, wherein the overwriting means writes the entire updated segment table, including non-updated sections, over the corresponding part of the FAT recorded in the information-recording medium.

7. A recording method of a recording apparatus for recording data files on a FAT-formatted information-recording medium, the recording method comprising:

a creating step of dividing a FAT in the information-recording medium into a plurality of segment tables of a predetermined size and creating control information corresponding to each of the segment tables;

5 a reading step of reading a segment table from the information-recording medium according to the control information created in the creating step;

10 a maintaining step of maintaining the segment table read in the reading step;

a recording step of referring to the segment table maintained in the maintaining step to detect free unit recording areas in the information-recording medium, and recording the data files in the detected unit recording areas;

15 an updating step of updating the segment table maintained in the maintaining step, in response to the recording step; and

20 an overwriting step of partially overwriting the FAT in the information-recording medium with the updated segment table.

25 8. A recording medium for recording a computer-readable

program of a recording apparatus for recording data files on a FAT-formatted information-recording medium, the program comprising:

a creating step of dividing a FAT in the information-recording medium into a plurality of segment tables of a predetermined size and creating control information corresponding to each of the segment tables;

5 a reading step of reading a segment table from the information-recording medium according to the control information created in the creating step;

10 a maintaining step of maintaining the segment table read in the reading step;

a recording step of referring to the segment table maintained in the maintaining step to detect free unit recording areas in the information-recording medium, and recording the data files in the detected unit recording areas;

15 an updating step of updating the segment table maintained in the maintaining step, in response to the recording step; and

20 an overwriting step of partially overwriting the FAT in the information-recording medium with the updated segment table.

25 9. A program for a computer that controls a recording

apparatus for recording data files on a FAT-formatted information-recording medium to execute the process comprising:

- a creating step of dividing a FAT in the information-recording medium into a plurality of segment tables of a predetermined size and creating control information corresponding to each of the segment tables;
- 5 a reading step of reading a segment table from the information-recording medium according to the control information created in the creating step;
- 10 a maintaining step of maintaining the segment table read in the reading step;
- a recording step of referring to the segment table maintained in the maintaining step to detect free unit recording areas in the information-recording medium, and recording the data files in the detected unit recording areas;
- 15 an updating step of updating the segment table maintained in the maintaining step, in response to the recording step; and
- 20 an overwriting step of partially overwriting the FAT in the information-recording medium with the updated segment table.